

## ABSTRACT OF THE DISCLOSURE

An optimal recording apparatus and method for optical recording media are disclosed which are capable of recording data on the optical recording medium under optimum conditions in an optical recording/reproducing apparatus.

In accordance with the optimal recording apparatus and method, a reference power value recorded on an optical recording medium is first read out. Test data is then recorded onto a first field of a test data in the optical recording medium under a condition in which a recording power value is varied with reference to the read power value. The test data recorded on the first field is subsequently reproduced in order to determine an optimum recording power value from the reproduced characteristics. Based on the determined optimum recording power value, test data is recorded on a second field of the test area under a condition in which a format of recording signals is varied. The test data recorded on the second field is subsequently reproduced in order to determine an optimum write strategy. Desired data is then recorded on the optical recording medium, using the determined optimum write strategy and the determined recording power value.